

REMARKS

Claims 20-51 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to independent Claims 20, 31, 42 and 47, examiner states in pertinent part that:

“[...] the claims recite “distributed processing by a processor” which is indefinite. [...] Therefore performing distributed processing by a processor is inconsistent with its meaning in the art.”

Independent Claims 20, 31, 42 and 47 have been amended to replace the phrase “distributed processing” replaced with “storage and processing”.

With respect to Claims 20-41, examiner further states that:

“For the purpose of examination of Claims 20-41 “by a processor” in the preamble is not considered and all instances of “by the processor” will be interpreted as “by a processor”.

As a result of above amendments to Claims 20, 31, 42, 47 replacing “distributed processing” in the Claim preambles with the “storage and processing”, Applicant respectfully requests consideration of the phrase “by a processor” in the respective Claim preambles as reference for all subsequent instances of “by the processor” in the respective Claim bodies.

Claims 20-26, 30-37, 41 are rejected under 35 USC 102(b) as being anticipated by Scales US Patent 5,761,729. Applicant respectfully notes that Scales discloses “validation checking of shared memory accesses” (Scales, invention title) to implement a multi-processor shared-memory scheme, wherein the processors coordinate their accesses to a set of shared data structures stored in a set of memories such that “programs executing on any of the processors can access any of the shared data structures stored in any of the memories” (Scales, Col. 4, lines 5-6).

In contrast, Applicant's invention as recited in independent Claim 20 describes a method wherein a processor uses semaphores to manage a limited amount of on-processor memory in order to execute an algorithm that is too large to be stored entirely within said limited memory.

Independent Claim 31 recites the same limitations as Claim 20 albeit in a computer program product form that is nonetheless also allowable over the cited art. Dependent Claims 21-26, 30, 32-37, 41 depend either directly or indirectly from independent Claims 20 or 31 and are also allowable for at least the reasons stated for Claims 20 and 31. Therefore, Applicant respectfully submits that Claims 20-26, 30-37, 41 are allowable over the cited references.

Claims 20-25, 31-36, 42-51 are rejected under 35 USC 102(b) as being anticipated by Tanenbaum et al. "Operating Systems: Design and Implementation." Applicant respectfully notes that Tanenbaum uses semaphores in a classic solution to the "readers and writers problem" modeling access to a data base by a plurality of readers and writers, implementing the restriction that "it is acceptable to have multiple processes reading the data base at the same time, but if one process is updating (writing) the data base, no other processes may have access to the data base, not even readers." (Tanenbaum, Page 79, 1st paragraph.) In contrast, Applicant's invention as recited in independent Claims 20 and 42 describes a method wherein a processor uses semaphores to manage a limited amount of on-processor memory in order to execute an algorithm which is too large to be stored entirely within said limited memory. In particular, whereas Tanenbaum uses semaphores for growing and shrinking a pool of simultaneous readers and for granting exclusive data base access to individual writers when the reader pool is empty, the semaphores as recited in independent Claims 20 and 42 indicate availability of program code or data stored in the limited on-processor memory for use by the processor. Independent Claims 31 and 47 respectively recite the same limitations as Claims 20 and 42 albeit in computer program product form that is nonetheless also allowable over the cited art. Dependent Claims

21-25, 32-36, 43-46, 48-51 depend either directly or indirectly from independent Claims 20, 31, 42, 47 and are also allowable for at least the reasons stated for Claims 20, 31, 42, 47. Therefore, the Applicant believes that Claims 21-25, 32-36, 43-46, 48-51 are allowable over the cited references.

Dependent Claims 27-29, 38-39 are rejected under 35 USC 103(a) as being unpatentable over Scales US Patent 5,761,729. In regards to Claim 27, examiner states in pertinent part:

“[...] Scales discloses a general purpose method of passing data from one process to another. It is well known in the art of Digital Signal Processing the use of Consumer-Producer model for signal processing wherein one process load and stores FFT data to be operated in a shared memory space and for another process to process the data located in the shared memory space [...]”

Applicant respectfully notes that in contrast to the shared-memory scheme recited by the examiner, wherein a first process stores FFT data into a piece of shared memory such that a second process can process the stored FFT data, the invention as recited in Claim 27 discloses a method for storing code representing a portion of an FFT program in a processing environment with limited memory, such that execution of the FFT program can begin even though the FFT program is too large to be stored entirely within the limited memory. Dependent Claims 28-29 depend either directly or indirectly from Claim 27 and are also allowable for at least the reasons stated for Claim 27. Dependent Claim 38 and 39 recite the same limitations as Claims 27 and 28 albeit in computer program product form that is nonetheless also allowable over the cited art. Therefore, the Applicant believes that Claims 27-29, 38-39 are allowable over the cited references.

CONCLUSION

The Applicant believes that the currently amended independent Claims 20, 31, 42, 47 and dependent Claims 21-30, 32-41, 43-46, 48-51 are allowable over the cited references and it is respectfully submitted that all pending claims are allowable. Should the Examiner believe that a further telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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